WHAT IS CLAIMED IS:

1. A rock drill comprising:

a frame;

a shank that is arranged in the front section of the drill and that is axially movable;

a percussion device having a reciprocating percussion piston on the same axis with the shank and arranged to hit the back end of the shank to provide impact pulses in drilling equipment to be fastened to the shank, the percussion piston having an absorber to absorb the percussion piston impacts that extend to the front side of a designed impact point;

a pulling element that is a sleeve-like piece arranged around the shank, the drill having means for exerting a pulling force to the pulling element and for moving the pulling element by a pulling force axially toward the percussion piston, the pulling element further having a first bearing surface that is arranged to act on a second bearing surface on the shank to move the shank by said pulling force to the designed impact point, and wherein:

during rock drilling, a push force is arranged to act on the pulling element, the push force being stronger than the pulling force exerted to the pulling element during drilling; and

during rock drilling, due to said push force, the pulling element is positioned toward the front section of the drill at a predefined distance from the position corresponding to the impact point of the shank.

2. A rock drill as claimed in claim 1, wherein

at the back end of the pulling element, there is a pressure surface and that the pressure surface is connected to a channel for feeding a pressure medium to act on said pressure surface to achieve the push force.

3. A rock drill as claimed in claim 2, wherein

the pulling element and the frame of the drill limit between them a circular pressure space that has a pressure surface.

4. A rock drill as claimed in claim 3, wherein the circular pressure space is sealed with sealings arranged between the pulling element and the frame of the drill.

5. A rock drill as claimed in claim 2, wherein

the pressure medium is a mixture of gas and lubricant used to lubricate the drill.

6. A rock drill as claimed in claim 1, wherein

at the front end of the pulling element, there is a pressure surface that is connected to a first channel,

and the pressure of a pressure medium is fed from said channel to act on said pressure surface to achieve a pulling force.

7. A rock drill as claimed in claim 6, wherein

a sleeve-like second pulling piston is arranged coaxially with the pulling element,

at the front end of the second pulling piston, there is a pressure surface that is connected to a channel for feeding a pressure medium to said pressure surface in order to move the second pulling piston toward the percussion piston,

a pulling force provided by the second pulling piston is stronger than a force having an opposite direction and acting on the pulling element,

the circumference of the pulling element has a shoulder, on which the second pulling piston is arranged to act for generating a pulling force in order to move the pulling element toward the percussion piston,

the movement of the pulling element is restricted by a mechanical surfaces formed in the frame,

the movement of the second pulling piston toward the percussion piston is restricted by the shoulder in such a manner that the pulling element is in the rearmost position of the second pulling piston at a distance from the mechanical surfaces limiting the forward movement of the pulling element,

and the forward movement of at least the second pulling piston is absorbed by an absorber.

8. A rock drill as claimed in claim 1, wherein

on the front side of the pulling element, there are several cylinder spaces parallel to the shank,

each cylinder space is equipped with a cylindrical pulling piston,

and the pressure of a pressure medium is led from a channel to the front ends of the pulling pistons to move the pulling pistons toward the percussion piston and to provide a pulling force to the pulling element.

9. A rock drill as claimed in claim 8, wherein

the cylindrical pulling pistons are divided according to their travel length into at least two piston groups,

and the movement of the pulling pistons having a shorter travel length is limited toward the percussion piston,

during rock drilling, the pulling pistons having a shorter travel length are arranged to provide a second force toward the percussion piston that is stronger than the push force acting on the pulling element,

the pulling element is during rock drilling supported by means of the pulling pistons having a shorter travel length to be at a distance from the foremost extreme position of the pulling element,

and there is an absorber arranged at least to each pulling piston having a shorter travel length for absorbing the forward movement of the pulling piston and the pulling element supported thereby in the foremost extreme position of the pulling pistons.

10. A rock drill as claimed in claim 8, wherein

a pulling pin parallel to the pulling piston is arranged between each pulling piston and the pulling element behind it to transmit a force from the pulling piston to the pulling element.